AIR QUALITY PERMIT

Issued To: Lyons Construction, Inc.

Permit #3268-01 145 Crying George Road Request for Administrative Amendment

Butte, MT 59701 (AA) Received: 06/12/07

Department Decision on AA: 7/19/07

Permit Final: 08/04/07

AFS # 777-3268

An air quality permit, with conditions, is hereby granted to Lyons Construction, Inc. (Lyons), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, et seq., as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Lyons owns and operates a portable batch mix asphalt plant initially located in Section 16, Township 3 North, Range 8 West, in Silver Bow County, Montana. Permit #3268-01 applies while operating at any location within Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program or tribal lands. A Missoula County air quality permit will be required for locations within Missoula County. Further, Addendum 1 and Permit #3268-01 apply to the Lyons facility while operating at any location in or within 10 kilometers (km) of any particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀) nonattainment area during the summer months (April through September). A more complete list of permitted equipment is contained in Section I.A of the permit analysis to this permit.

B. **Current Permit Action**

On June 12, 2007, in accordance with the provisions contained in ARM 17.8.764, the Department received a request from Lyons for an administrative amendment (AA) to Permit #3268-00. Specifically, Lyons requested the following changes under the AA:

- Revision of the batch mix asphalt plant source testing schedule;
- Specification of diesel fuel rather than fuel oil as an allowable fuel for asphalt plant operations; and
- Removal of the requirement for a device to measure the pressure drop (magnehelic gauge, manometer, etc.) on the asphalt plant control devices (dry cyclone and wet scrubber) and temperature indicators at the asphalt plant control device(s) inlet and outlet.

The Department determined that revision of the batch mix asphalt plant source test schedule and specification of diesel fuel are appropriate under the provisions contained in ARM 17.8.764. However, because the requirements for control device monitoring were established in accordance with ARM 17.8.752 and thus constitute Best Available Control Technology (BACT) for the permitted operations, the Department determined that this change cannot be accommodated under an AA, as requested. A more detailed discussion of the current permit action is contained in Section I.D of the Permit Analysis to this permit.

Section II: Limitations and Conditions

A. Operational and Emission Limitations

- 1. Asphalt plant particulate matter emissions shall be limited to 0.10 gr/dscf (ARM 17.8.752).
- 2. Lyons shall not cause or authorize to be discharged into the atmosphere, from the asphalt plant, stack emissions that exhibit 20% opacity or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).
- 3. Lyons shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
- 4. Lyons shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 5. Lyons shall treat all unpaved portions of the haul roads, access roads, and the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.752).
- 6. A device to measure the pressure drop (magnehelic gauge, manometer, etc.) on the control devices (dry cyclone and wet scrubber) must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the control device inlet and outlet must be installed and maintained according to Section II.B.2 and II.B.3 (ARM 17.8.752).
- 7. Once a stack test is performed, the asphalt plant production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
- 8. Total asphalt plant production shall not exceed 646,800 tons of asphalt during any rolling 12-month time period (ARM 17.8.749).
- 9. The asphalt plant shall not exceed 5,390 hours of operation during any rolling 12-month time period (ARM 17.8.749).
- 10. Lyons shall not operate more than one diesel generator and the maximum rated design capacity shall not exceed 400 Kilowatts (kW) (ARM 17.8.749).
- 11. The diesel generator shall not exceed 5,390 hours of operation during any rolling 12-month time period (ARM 17.8.749).
- 12. If the permitted equipment is used in conjunction with any other equipment owned or operated by Lyons, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month time period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

- 13. Lyons shall install, operate, and maintain a dry cyclone and wet scrubber on the asphalt plant drum, as specified in Permit Application #3268-00 (ARM 17.8.752).
- 14. Lyons shall only use natural gas, diesel fuel oil, or waste oil to fire the drum dryer, and Lyons shall only use natural gas to fire the asphalt heater (ARM 17.8.749).

B. Testing Requirements

- 1. The first time the Lyons plant has an asphalt job that requires 720 tons of asphalt and is expected to operate at least 6 hours during any 10-hour time frame, an EPA (Methods 1-5 and 9) source test shall be performed on the asphalt plant to demonstrate compliance with Sections II.A.1, II.A.2, and II.A.3. A source test performed on the plant in another state within the past 4 years may be substituted for this initial test if approved by the Department in writing (ARM 17.8.105 and ARM 17.8.749).
- 2. An EPA (Methods 1-5 and 9) source test must be performed on the asphalt plant the first time after 4 years from the initial test that the asphalt plant has a job that requires 720 tons of asphalt and is expected to operate for at least 6 hours during any 10-hour time frame or according to another source testing schedule as may be approved by the Department in writing (ARM 17.8.105 and ARM 17.8.749).
- 3. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.A.6 (ARM 17.8.749).
- 4. Pressure drop on the control device and temperatures must be recorded during the test and reported as part of the test results (ARM 17.8.749).
- 5. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 6. Since asphalt production will be limited to the average production rate during the test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).
- 7. Lyons may retest at any time in order to operate at a higher production rate (ARM 17.8.749).
- 8. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If the asphalt plant is moved to another location, an *Intent to Transfer Form* must be sent to the Department. In addition, a *Public Notice Form for Change of Location* must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.765).
- 2. Lyons shall maintain on-site records showing daily hours of operation, daily

production rates, and daily pressure drop and temperature readings for the last 12-months. The records compiled in accordance with this permit shall be maintained by Lyons as a permanent business record for at least 5 years following the date of the measurement, shall be submitted to the Department upon request, and shall be available at the plant for inspection by the Department (ARM 17.8.749).

3. Lyons shall supply the Department with annual production information for all emission points, as required, by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in units, as required by the Department. This information may be used for calculating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 4. Lyons shall document, by month, the total plant production of asphalt. By the 25th day of each month, Lyons shall total the production of asphalt for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 5. Lyons shall document, by month, the hours of operation of the asphalt plant. By the 25th day of each month, Lyons shall total the hours of operation of the asphalt plant for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Lyons shall document, by month, the hours of operation of the diesel generator. By the 25th day of each month, Lyons shall total the hours of operation of the generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. Lyons shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

Lyons shall comply with all applicable conditions and limitations contained in Addendum 1 to Permit #3268-01 (ARM 17.8.749).

Section IV: General Conditions

- A. Inspection Lyons shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Lyons fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Lyons of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756)
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Lyons may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.

J. Lyons shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program.

Permit Analysis Lyons Construction, Inc. Permit #3268-00

I. Introduction

A. Permitted Equipment

Lyons Construction, Inc. (Lyons) operates a portable 1968 Barber Green hot mix asphalt plant (120 tons per hour (TPH)), a diesel generator (up to 400 Kilowatts (kW)), and associated equipment. Particulate emissions from the batch mix asphalt plant are controlled by a dry cyclone and wet scrubber.

B. Source Description

A typical operation for the hot mix asphalt plant begins by loading the aggregate into the bin feeder. The aggregate is conveyed to the asphalt plant drum dryer for drying, then conveyed to a batch tower, where it is screened and sorted into hoppers. The material is dropped onto a weigh hopper and released into a pugmill, where aggregate is mixed with a controlled amount of hot oil to create asphalt. Hot asphalt is loaded into trucks for transport to project sites.

C. Permit History

On July 31, 2003, Lyons was issued **Permit #3268-00** for the construction and operation of a portable 1968 Barber Green hot mix asphalt plant (120 TPH), a diesel generator (up to 400 kW), and associated equipment.

D. Current Permit Action

On June 12, 2007, in accordance with the provisions contained in the Administrative Rules of Montana (ARM) 17.8.764, the Department of Environmental Quality (Department) received a request from Lyons for an administrative amendment (AA) to Permit #3268-00. Specifically, Lyons requested the following changes under the AA:

- Revision of the batch mix asphalt plant source testing schedule;
- Specification of diesel fuel rather than fuel oil as an allowable fuel for asphalt plant operations; and
- Removal of the requirement for a device to measure the pressure drop
 (magnehelic gauge, manometer, etc.) on the asphalt plant control devices (dry
 cyclone and wet scrubber) and temperature indicators at the asphalt plant control
 device(s) inlet and outlet.

Because Lyons rarely operates the permitted asphalt plant and, to date, has not operated the asphalt plant for a period long enough to conduct the applicable reference method source testing, the Department determined that a change in source testing schedule is appropriate, in this case. Further, the Department believes that the intent of the previously established condition specifying fuel oil as an allowable fuel for the batch mix asphalt plant was to allow for the use of diesel fuel oil; therefore, the Department clarified this requirement under the current permit action. Finally, because the requirement for a device to measure pressure drop and temperature at the asphalt plant controls was established in accordance with ARM 17.8.752 and therefore constitutes Best Available Control Technology (BACT) for the project, the Department determined that this change cannot be accommodated under an AA, as requested. **Permit #3268-01** replaces Permit #3268-00 and **Addendum 1** remains enforceable.

E. Additional Information (Changes to an existing permit)

Additional information, such as applicable rules and regulations, BACT, Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies, where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Lyons shall comply with all requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation.
 (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Lyons must comply with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Lyons shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
 - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions.
 - 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
 - 7. ARM 17.8.340 Standard of Performance for New Stationary Sources. The owner and operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60. This plant consists of a portable 1968 Barber Green Hot Mix Asphalt Plant (maximum production rate 120 TPH) and associated equipment. Therefore, New Source Performance Standards (NSPS) (40 CFR Part 60, Subpart A, General Provisions, and Subpart I, Hot Mix Asphalt Facilities) do not apply to the facility.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. Lyons shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. The current permit action is an administrative amendment and does not require a permit application or a permit application fee.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use any asphalt plant, crusher, or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Lyons has the PTE more than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), oxides of nitrogen (NO_x), carbon monoxide (CO), and oxides of sulfur (SO_x); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u>
 <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
 Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Lyons submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general

- circulation in the area affected by the application for a permit. The current permit action is an administrative amendment and does not require public notice.
- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The current permit action is an administrative amendment and does not require a BACT analysis and determination.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Lyons of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer,

including the names of the transferor and the transferee, is sent to the Department.

- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule, or
 - c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3268-01 for Lyons the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is not located in a serious PM_{10} nonattainment area.
 - d. This facility is not subject to any current National Emission Standard for Hazardous Air Pollutants (NESHAP) standards.
 - e. This facility is not subject to any current NSPS standards.
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Lyons would be a minor source of emissions as defined under Title V.

III. Emission Inventory

	ton/year							
Emitting Unit	PM	PM_{10}	NOx	CO	VOC	SOx		
1968 Barber Green Batch Mix Asphalt Plant	28.01	22.41	17.79	42.04	10.35	18.76		
Elevators, Screens, Bins, and Mixer	12.13	9.70	0.00	0.00	0.00	0.00		
Cold Aggregate Handling	16.17	12.94	0.00	0.00	0.00	0.00		
Asphalt Heater	0.00	0.00	0.69	0.00	0.01	0.01		
Diesel Generator	3.18	3.18	44.81	9.66	3.57	2.96		
Haul Roads	2.74	1.23	0.00	0.00	0.00	0.00		
Total Emissions	62.23	49.46	63.29	51.70	13.93	21.73		
A complete emission inventory to Permit #3268-01 is on file with the Department								

IV. BACT Determination

A BACT determination is required for each new or altered source. Lyons shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. The current permit action is an administrative amendment and does not require a BACT determination.

V. Existing Air Quality

Permit #3268-01 is issued for the operation of a portable batch mix asphalt plant to be initially located in Section 16, Township 3 North, Range 8 West, in Silver Bow County, Montana. Permit #3268-01 applies while operating at any location within Montana, except within those areas having a Department-approved permitting program or tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County*. Further, Addendum 1 and Permit #3268-01 apply to the Lyons facility while operating at any location in or within 10 km of any PM₁₀ nonattainment area during the summer months (April through September).

VI. Ambient Air Quality Impact Analysis

Permit #3268-01 applies while operating at any location within Montana, except within those areas having a Department-approved permitting program or tribal lands. *A Missoula County air quality permit will be required for locations within Missoula County*. Further, Addendum 1 and Permit #3268-01 apply to the Lyons facility while operating at any location in or within 10 km of any PM₁₀ nonattainment area during the summer months (April through September). Addendum 1 does not allow Lyons to operate at any location in or within 10 km of any PM₁₀ nonattainment area during the winter months (October through March). Addendum 1 includes more stringent conditions and limits that are protective of the PM₁₀ nonattainment areas. In the view of the Department, the amount of controlled emissions (Permitted Allowable Emissions) generated by this facility will not exceed any set ambient standard in any given area of operations.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

The current permit action is considered an administrative action and does not require the preparation of an environmental assessment.

Permit Analysis Prepared By: M. Eric Merchant Date: June 20, 2007

Addendum 1 Lyons Construction, Inc. Permit #3268-01

An addendum to air quality Permit #3268-01, with conditions, is issued to Lyons Construction, Inc. (Lyons) pursuant to Sections 75-2-204 and 75-2-211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.765, as amended, for the following:

I. Permitted Equipment:

On June 3, 2003, the Department of Environmental Quality (Department) received an application from Lyons. The application requested an addendum and permit be established to allow the operation of a portable asphalt plant, including operation in or within 10 kilometers (km) of the following particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}) nonattainment areas: Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte.

II. Seasonal and Site Restrictions

Addendum 1 applies to the Lyons facility while operating at any location in or within 10 km of certain PM_{10} nonattainment areas (Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte). Additionally, seasonal and site restrictions apply to the facility as follows:

- A. During the winter season (October 1-March 31), Lyons is not allowed to operate in or within 10 km of certain PM₁₀ nonattainment areas, including, but not limited to Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte.
- B. During the summer season (April 1-September 30), Lyons may operate at any location in or within 10 km of the Libby, Thompson Falls, Kalispell, Whitefish, Columbia Falls, and Butte PM_{10} nonattainment areas.
- C. Lyons shall comply with the limitations and conditions contained in Addendum #1 to Permit #3268-01 while operating in or within 10 km of any of the previously listed PM₁₀ nonattainment areas. Addendum #1 shall be valid until revoked or modified. The Department reserves the authority to modify Addendum #1 at any time based on local conditions of any future site. These conditions may include, but are not limited to, local terrain, meteorological conditions, proximity to residences or other businesses, etc.

III. Limitations and Conditions

A. Operational

- 1. Asphalt plant particulate matter emissions shall be limited to 0.10 grains per dry standard cubic feet (gr/dscf) (ARM 17.8.752).
- 2. All visible emissions from the asphalt plant stack shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
- 3. Lyons shall not cause or authorize to be discharged into the atmosphere from any equipment, such as systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an

- opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
- 4. Lyons shall not cause or authorize to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant area, any visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749).
- 5. Lyons shall treat all unpaved portions of the haul roads, access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary to maintain compliance with the 10% opacity limitation contained in Section III.A.4 (ARM 17.8.749).
- 6. Asphalt plant production shall not exceed 2,880 tons during any rolling 24-hour time period (ARM 17.8.749).
- 7. The asphalt plant shall not exceed 5,390 hours of operation during any rolling 12-month time period (ARM 17.8.749).

B. Reporting Requirements

- 1. Lyons shall provide the Department with written notification of job completion within 10 working days of job completion (ARM 17.8.749).
- 2. Lyons shall provide written notice of relocation of the permitted equipment at least 15 days prior to the physical transfer of equipment (ARM 17.8.765).
- 3. Lyons shall document, by month, the hours of operation of the asphalt plant. By the 25th day of each month, Lyons shall total the hours of operation of the asphalt plant for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.9. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 4. Production information for the sites covered by this addendum must be submitted to the Department within 30 days of completion of the project. The information shall include (ARM 17.8.749):
 - a. Tons of asphalt produced;
 - b. Hours of operation;
 - c. Type (natural gas, diesel fuel oil, or waste oil) and amount (gallons of liquid or square cubic feet of gas) of fuel used for the asphalt plant (hot mix dryer and asphalt heater);
 - d. Gallons of diesel fuel used for the diesel generator;
 - e. Fugitive dust information consisting of a listing of all plant vehicles, including the following for each vehicle type:
 - i. Number of vehicles
 - ii. Vehicle type
 - iii. Vehicle weight, loaded
 - iv. Vehicle weight, unloaded

- v. Number of tires on vehicle
- vi. Average trip length
- vii. Number of trips per day per vehicle
- viii. Average vehicle speed
- ix. Area of activity
- x. Vehicle fuel usage (gasoline or diesel) annual total
- f. Fugitive dust control for haul roads and general plant area:
 - i. Hours of operation of water trucks
 - ii. Application schedule for chemical dust suppressant, if applicable.

Addendum #1 Analysis Lyons Construction, Inc. Permit #3268-01

I. Permitted Equipment

Lyons Construction, Inc. (Lyons) owns and operates a portable asphalt plant (maximum capacity 120 tons per hour (ton/hr)). Equipment used at the facility includes, but is not limited to the following:

- a. A 120 ton/hr Barber Green hot mix dryer (batch mix) with dry cyclone and wet scrubber (fired on natural gas, diesel fuel oil, or waste oil),
- b. A 1.8 MM BTU's per hour asphalt heater (fired on natural gas, diesel fuel oil, or waste oil),
- c. A 400-Kilowatt (kW) diesel generator, and
- d. Associated equipment (elevator, screens, bins, mixer, conveyors, etc.).

II. Source Description

For a typical operational setup, the hot mix asphalt plant begins by loading the aggregate into the bin feeder. The aggregate is conveyed to the asphalt plant drum dryer for drying, then conveyed to a batch tower, where it is screened and sorted into hoppers. The material is dropped onto a weigh hopper and released into a pugmill, where aggregate is mixed with a controlled amount of hot oil to create asphalt. Hot asphalt is loaded into trucks for transport to project sites.

III. Applicable Rules and Regulations

The following are partial quotations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

ARM 17.8, Subchapter 7 - Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

- A. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- B. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

C. <u>ARM 17.8.765 Transfer of Permit</u>. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer Location, the facility will operate in the new location for less than one year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

Lyons must submit proof of compliance with the transfer and public notice requirements when they transfer to the location covered by this addendum and will only be allowed to stay in the new location for a period of less than one year. Also, the conditions and controls of this addendum will keep Lyons from having a significant impact on the PM_{10} nonattainment areas covered by this permit.

IV. Emission Inventory

	pounds/day							
Emitting Unit	PM	PM_{10}	NOx	CO	VOC	SOx		
1968 Barber Green Batch Mix Asphalt Plant	153.49	122.79	97.46	230.37	56.71	102.78		
Elevators, Screens, Bins, and Mixer	66.45	53.16	0.00	0.00	0.00	0.00		
Cold Aggregate Handling	88.60	70.88	0.00	0.00	0.00	0.00		
Asphalt Heater	0.00	0.00	3.23	0.00	0.06	0.01		
Diesel Generator	17.43	17.43	245.55	52.91	19.57	16.24		
Haul Roads	15.00	6.75	0.00	0.00	0.00	0.00		
Total Emissions	340.97	271.01	346.24	283.28	76.34	119.03		
A complete emission inventory for Addendum 1 to Permit #3268-01 is on file with the Department								

V. Existing Air Quality

On July 1, 1987, the Environmental Protection Agency (EPA) promulgated new National Ambient Air Quality Standards (NAAQS) for particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀). Due to exceedances of the NAAQS for PM₁₀, the cities of Kalispell (and the nearby Evergreen area), Columbia Falls, Butte, Whitefish, Libby, Missoula, and Thompson Falls were designated by EPA as nonattainment for PM₁₀. As a result of this designation, EPA required the Department and the City-County Health Departments to submit PM₁₀ State Implementation Plans (SIP). The SIPs consisted of emission control plans that controlled fugitive dust emissions from roads, parking lots, construction, and demolition, since technical studies determined these sources to be the major contributors to PM₁₀ emissions.

Addendum #1 to Permit #3268-01 is for a portable asphalt plant to be located in or within 10 km of certain PM_{10} nonattainment areas during the summer season (April through September). Summertime operations may be conducted in or within 10 km of certain PM_{10} nonattainment areas, including, but not limited to Libby, Kalispell, Columbia Falls, Whitefish, Thompson Falls, and Butte.

VI. Air Quality Impacts

In the view of the Department, the amount of controlled emissions generated by the operation will not exceed any set ambient standard. Permit #3268-01 and Addendum 1 contain limitations and conditions that will be protective of the PM_{10} nonattainment areas.

Addendum Analysis Prepared By: M. Eric Merchant

Date: July 19, 2007